United States Department of Agriculture **Forest Service** **Southwestern Region Forest Health Arizona Zone Office**

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File Code: 3420 **Date:** November 3, 2005
Route To: (2400), (5100)

Subject: Proposed 2006 Willow Ridge Restoration Project, Santa Catalina RD (santacatalinard)

To: District Ranger, Santa Catalina RD

This letter serves as an evaluation for the proposed FY 2006 Willow Ridge Restoration Project submitted by Bill Hart, Fuels Management Specialist. I met with Bill and evaluated the project area on October 18, 2005. The proposal was submitted to cover the costs associated with precommercial thinning and slash treatment on 45-acres.

The Willow Ridge project area is located between the Willow Canyon summerhome subdivision and Rose Canyon Lake Recreation Area. Forest vegetation is composed of Arizona pine (a 5-needled variety of ponderosa pine), Douglas fir, silverleaf oak, Arizona white oak, and Chihuahua pine. Stand densities and fuel loadings are very high throughout most of the area (Figure 1). Two different wildfires burned over small parts of the subdivision in the past 4 years, resulting in the destruction of 15 of the 72 summerhomes and many snags present in burned areas (Figure 2). However, most of the overcrowded stands survived these fires. Southwestern dwarf mistletoe infection in Arizona pine is present throughout the ridge and bark beetle activity (either southern pine beetle or Mexican pine beetle) was observed in a few groups of old growth trees in unburned areas.

Figure 1 Willow Canyon Summerhome area is densely stocked.

Figure 2 Snags show signs of dwarf mistletoe infection.

The primary objectives for the Willow Ridge Restoration project are to decrease live fuel levels, reduce competition, and decrease dwarf mistletoe infection levels in order to promote the health and longevity of residual trees. The proposed treatment is to thin from below to 70 square feet of basal area per acre (BA) by targeting trees less than 16"dbh. Spacing between residual trees is based on the diameter of targeted residuals. Trees less than 5"dbh will be spaced 12' to 15' apart; 5" to 9"dbh trees will be spaced by 15' to 18'; and trees 9" to 16"dbh will be separated 20 to 25 feet. Dwarf mistletoe infected trees will be selected for removal over uninfected trees. Slash will be piled and burned. The District hopes to contract with the Mt. Lemmon Fire District to get this project completed.

In addition to agreeing with the proposed prescriptions, our office recommends that slash be generated between late summer and the end of December, if possible, in order to lessen the buildup of ips bark beetles. Slash piles should be placed in stand openings as much as possible and the largest diameter slash put on the outside of the pile to promote quick drying. Tepee style slash piles with branches and small-diameter slash in the middle and the larger diameter material on the outside.

If you have any questions regarding this evaluation, please let us know. I can be reached at (928) 556-2075 (mfairweather@fs.fed.us, Mary Lou).

/s/ Mary Lou Fairweather
MARY LOU FAIRWEATHER
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cc:
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